

specific for a sequence selected from the group consisting of: SEQ ID NO: 56 and complements of SEQ ID NO: 56; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

56. (New) The method of claim 55, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 56.

57. (New) A method for detecting breast cancer in a patient comprising:

(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotide primers is specific for a sequence selected from the group consisting of: SEQ ID NO: 59 and complements of SEQ ID NO: 59; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

58. (New) The method of claim 57, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 59.

59. (New) A method for detecting breast cancer in a patient comprising:

(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotide primers is specific for a sequence selected from the group consisting of: SEQ ID NO: 60 and complements of SEQ ID NO: 60; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

60. (New) The method of claim 59, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 60.

61. (New) A method for detecting breast cancer in a patient comprising:

(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotide primers is specific for a sequence selected from the group consisting of: SEQ ID NO: 61 and complements of SEQ ID NO: 61; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

62. (New) The method of claim 61, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 61.

63. (New) A method for detecting breast cancer in a patient comprising:

(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotide primers is specific for a sequence selected from the group consisting of: SEQ ID NO: 62 and complements of SEQ ID NO: 62; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

64. (New) The method of claim 63, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 62.

65. (New) A method for detecting breast cancer in a patient comprising:

(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotide primers is specific for a sequence selected from the group consisting of: SEQ ID NO: 63 and complements of SEQ ID NO: 63; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

66. (New) The method of claim 65, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 63.

67. (New) A method for detecting breast cancer in a patient comprising:

(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotide primers is specific for a sequence selected from the group consisting of: SEQ ID NO: 64 and complements of SEQ ID NO: 64; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

68. (New) The method of claim 67, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 64.

69. (New) A method for detecting breast cancer in a patient comprising:

(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotide primers is specific for a sequence selected from the group consisting of: SEQ ID NO: 65 and complements of SEQ ID NO: 65; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

70. (New) The method of claim 69, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 65.

71. (New) A method for detecting breast cancer in a patient comprising:
(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotide primers is specific for a sequence selected from the group consisting of: SEQ ID NO: 67 and complements of SEQ ID NO: 67; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.

72. (New) The method of claim 71, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of SEQ ID NO: 67.

73. (New) (New) A method for detecting breast cancer in a patient, comprising:

(a) obtaining a biological sample from the patient;
(b) contacting the biological sample with an oligonucleotide probe specific for a sequence selected from the group consisting of: SEQ ID NO: 59 and complements of SEQ ID NO: 59; and
(c) detecting in the sample a polynucleotide sequence that hybridizes to the oligonucleotide probe, thereby detecting breast cancer in the patient.

74. (New) The method of claim 73 wherein the oligonucleotide probe comprises at least about 15 contiguous nucleotides of SEQ ID NO: 59.

75. (New) A method for detecting breast cancer in a patient, comprising:
(a) obtaining a biological sample from the patient;
(b) contacting the biological sample with an oligonucleotide probe specific for a sequence selected from the group consisting of: SEQ ID NO: 60 and complements of SEQ ID NO: 60; and
(c) detecting in the sample a polynucleotide sequence that hybridizes to the oligonucleotide probe, thereby detecting breast cancer in the patient.

76. (New) The method of claim 75 wherein the oligonucleotide probe comprises at least about 15 contiguous nucleotides of SEQ ID NO: 60.

77. (New) A method for detecting breast cancer in a patient, comprising:
(a) obtaining a biological sample from the patient;
(b) contacting the biological sample with an oligonucleotide probe specific for a sequence selected from the group consisting of: SEQ ID NO: 61 and complements of SEQ ID NO: 61; and
(c) detecting in the sample a polynucleotide sequence that hybridizes to the oligonucleotide probe, thereby detecting breast cancer in the patient.

78. (New) The method of claim 77 wherein the oligonucleotide probe comprises at least about 15 contiguous nucleotides of SEQ ID NO: 61.

79. (New) A method for detecting breast cancer in a patient, comprising:
(a) obtaining a biological sample from the patient;
(b) contacting the biological sample with an oligonucleotide probe specific for a sequence selected from the group consisting of: SEQ ID NO: 62 and complements of SEQ ID NO: 62; and
(c) detecting in the sample a polynucleotide sequence that hybridizes to the oligonucleotide probe, thereby detecting breast cancer in the patient.

80. (New) The method of claim 79 wherein the oligonucleotide probe comprises at least about 15 contiguous nucleotides of SEQ ID NO: 62.

81. (New) A method for detecting breast cancer in a patient, comprising:
(a) obtaining a biological sample from the patient,

(b) contacting the biological sample with an oligonucleotide probe specific for a sequence selected from the group consisting of: SEQ ID NO: 63 and complements of SEQ ID NO: 63; and

(c) detecting in the sample a polynucleotide sequence that hybridizes to the oligonucleotide probe, thereby detecting breast cancer in the patient.

82. (New) The method of claim 81 wherein the oligonucleotide probe comprises at least about 15 contiguous nucleotides of SEQ ID NO: 63.

83. (New) A method for detecting breast cancer in a patient, comprising:

(a) obtaining a biological sample from the patient;

(b) contacting the biological sample with an oligonucleotide probe specific for a sequence selected from the group consisting of: SEQ ID NO: 64 and complements of SEQ ID NO: 64; and

(c) detecting in the sample a polynucleotide sequence that hybridizes to the oligonucleotide probe, thereby detecting breast cancer in the patient.

84. (New) The method of claim 83 wherein the oligonucleotide probe comprises at least about 15 contiguous nucleotides of SEQ ID NO: 64.

85. (New) A method for detecting breast cancer in a patient, comprising:

(a) obtaining a biological sample from the patient;

(b) contacting the biological sample with an oligonucleotide probe specific for a sequence selected from the group consisting of: SEQ ID NO: 65 and complements of SEQ ID NO: 65; and

(c) detecting in the sample a polynucleotide sequence that hybridizes to the oligonucleotide probe, thereby detecting breast cancer in the patient.

86. (New) The method of claim 87 wherein the oligonucleotide probe comprises at least about 15 contiguous nucleotides of SEQ ID NO: 65.

87. (New) A method for detecting breast cancer in a patient, comprising:

(a) obtaining a biological sample from the patient;

(b) contacting the biological sample with an oligonucleotide probe specific for a sequence selected from the group consisting of: SEQ ID NO: 67 and complements of SEQ ID NO: 67; and

(c) detecting in the sample a polynucleotide sequence that hybridizes to the oligonucleotide probe, thereby detecting breast cancer in the patient.

88. (New) The method of claim 89 wherein the oligonucleotide probe comprises at least about 15 contiguous nucleotides of SEQ ID NO: 67.

Amend claims 33, 44, 53 and 54 to read as follows:

33. (Three times amended) The method of claim 53, wherein at least one of the oligonucleotide primers comprises between about 10 and 40 contiguous nucleotides of SEQ ID NO: 55.

44. (Three times amended) The method of claim 54 wherein the oligonucleotide probe comprises between about 10 and 40 contiguous nucleotides of SEQ ID NO: 55.

53. (Amended) A method for detecting breast cancer in a patient comprising:

(a) contacting a biological sample from a patient with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a sequence selected from the group consisting of: SEQ ID NO: 55 and complements of SEQ ID NO: 55; and

(b) detecting in the sample a polynucleotide sequence that amplifies in the presence of the oligonucleotide primers, thereby detecting breast cancer.